



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/671,748

09/26/2003

William Z. Guan

AVA-P012

9354

47389

7590

05/05/2006

PATTERSON & SHERIDAN, LLP
3040 POST OAK BLVD
SUITE 1500
HOUSTON, TX 77095

EXAMINER

ESTRADA, ANGEL R

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,748

Applicant(s)

GUAN ET AL.

Examiner

Angel R. Estrada

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,14-21 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-21 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Finality Withdrawn

1. The Finality of the Office Action Mailed on January 25, 2006 has been withdrawn.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

Claim 5 line 2, "the cylindrical-shaped slot", lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loh (US 6,798,966) in view of Chang (US 5,153,380).

Regarding claim 1, Loh discloses a fiber optic module package (10), comprising: a lid (4) having a bottom surface and a slot (41) with an outer wall; and a module housing (1) having a side slot (124); but Loh lacks the module housing having a knife-shaped edge that forms a sealing mechanism. Chang teaches a fiber optic module package (see figure 3), comprising: a lid (4) having a bottom surface; and a module housing (1) having a knife-shaped edge (111); wherein the lid (4) and the module housing (1) are sealed when the knife-shaped edge (111) bites into the bottom surface of the lid to form a sealing mechanism (see figures 4a and 4c; or see column 2 lines 28-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Loh's module package with a housing having a knife-shaped edge that bites into the bottom surface of the lid to form a sealing mechanism as taught by Chang to provide additional means for firmly securing the lid to the housing and for improving the module sealing capabilities.

Regarding claim 2, Chang teaches the fiber optic module package (see figure 3), further comprising a center die (not shown) for pressing the lid (4) onto the module housing (1) such that the knife-shaped edge bites (111) into the bottom surface of the lid (see figures 4a and 4c; or see column 2 lines 28-41).

Regarding claim 27, Loh discloses the fiber optic module package (10) wherein the lid (4) is made from a first material and the module housing is made from a second material (see figure 3). Furthermore, it would have been obvious to one having ordinary

Art Unit: 2831

skill in the art at the time the invention was made to make the lid of a first material and the module housing of a second material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 28, Loh discloses the fiber optic module package (10) wherein the first material of the lid comprises aluminum alloy, stainless steel, copper or titanium (see figure 3). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first material of the lid comprising aluminum alloy, stainless steel, copper or titanium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 29, Loh discloses the fiber optic module package (10) wherein the second material of the module housing comprises aluminum alloy, stainless steel, copper or titanium (see figure 3). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the second material of the module housing comprising aluminum alloy, stainless steel, copper or titanium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 30, Loh discloses the fiber optic module package (10) wherein the lid is made from the same material as the module housing (see figure 3).

Art Unit: 2831

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid and the module housing of the same material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loh (US 6,798,966) in view of Chang (US 5,153,380) and further in view of Shu (US 4,567,318).

Regarding claim 6, the modified Loh discloses the claimed invention except for the lid being made of a soft aluminum material and the module housing is made of a hard aluminum material. Shu teaches a fiber optic module package (see figure 4) comprising a lid (12) and a module housing (11) having knife-shaped edge (34) for forming a sealing mechanism; said lid (12) is made of soft aluminum material (column 4 lines 14-18) and the module housing is made of a hard metal material (such as hard aluminum, column 3 lines 36-40 or column 4 lines 48-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Loh's module package with a lid made of a soft aluminum material and the module housing made of a hard aluminum material as taught by Shu to facilitate the assembly process between the lid and the housing. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid of a soft aluminum material and the module housing of a hard aluminum material, since it

Art Unit: 2831

has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 7, Shu teaches the fiber optic module package (see figure 4) wherein the soft aluminum material of the lid (12) comprises Alloy 1100 (column 4 lines 59-60); and wherein the hard aluminum material of the module housing (11) comprises Alloy 6061 (column 4 lines 48-55).

Response to Arguments

5. Applicant's arguments filed April 20, 2006 have been fully considered and are persuasive.

In response to the applicants' argument that Examiner agrees that neither the combination of Saito (US 5,994,643) in view of Chang (US 5,153,380) nor the cited prior art teach, disclose or suggest a fiber optic module package comprising a module housing having a knife-shaped edge that bites into a bottom surface of the lid when the lid is pressed onto the module housing to form a metal-to-metal contact sealing mechanism, wherein the lid and the module housing are held together when a portion of the lid enters into the cavity and forms a holding pressure points proximate the upper wall of the cavity that interlocks the lid and the module housing.

Allowable Subject Matter

6. The indicated allowability of claim 1, 2 and 4-7 is withdrawn in view of the newly discovered reference(s) to Loh (US 6,798,966).

7. Claims 14-21 and 24-26 are allowed.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 14-21 and 24-26 is:

Regarding claims 14-21 and 24-26, the prior art does not teach or fairly suggest in combination with the other claimed limitations a fiber optic module package comprising a module housing having a knife-shaped edge that bites into a bottom surface of the lid when the lid is pressed onto the module housing to form a metal-to-metal contact sealing mechanism, wherein the lid and the module housing are held together when a portion of the lid enters into the cavity and forms a holding pressure points proximate the upper wall of the cavity that interlocks the lid and the module housing.

This limitation is found in claims 14-21 and 24-26, and is neither disclosed nor taught by the prior art of record, alone or in combination.

8. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 4 and 5 is:

Regarding claims 4 and 5, the prior art does not teach or fairly suggest in combination with the other claimed limitations of the lid and the module housing being held together when the outer wall of the slot of the lid enters into the side slot of the module housing to form a holding mechanism.

This limitation is found in claims 4 and 5, and is neither disclosed nor taught by the prior art of record, alone or in combination.

Conclusion

9. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

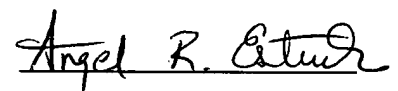
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Art Unit: 2831

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 1st, 2006

A handwritten signature in black ink, reading "Angel R. Estrada". The signature is fluid and cursive, with a horizontal line drawn underneath the name.

Angel R. Estrada
Primary Examiner
Art Unit: 2831